

Fl. & Fr.: September-November.

Ecology: Occasional; in coastal areas along sandy shores.

Specimen examined: South Andaman, Mahatma Gandhi Marine National Park, Rutland Island, Karthigeyan 6164 (PBL). 14.ix.2002.

Distribution: Sri Lanka, India, Bangladesh, Myanmar, Indo-China and Malay Peninsula.

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19. ADDITIONS TO THE FLORA OF MAHARASHTRA

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While investigating the flora of Satara, Sangli and Kolhapur districts of Maharashtra, I came across four plant species previously not recorded from Maharashtra. The paper provides their nomenclature, description, distribution and phenology. The species have been arranged alphabetically. All voucher specimens are deposited in the Herbarium of Shivaji University (SUK), Kolhapur.

1. *Habenaria elwesii* Hook. f. in Bot. Mag. t. 7478. 1896; Fischer in Fl. Pres. Madras 1468. 1928 (Repr. ed. 3: 1026. 1957) (Orchidaceae).

Herb, erect slender 25-40 cm high; tuber c. 2.0 x 1.0 cm, hairy. Leaves 3-6 alternate, about middle of the stem, 4.0-7.0 x 1.0-2.0 cm, lanceolate to oblong, acute. Inflorescence 8-16 cm long, lax-flowered. Flowers white, sessile, bracteate. Bracts 3.0 x 1.0 cm, foliaceous, cymbiform, longer than the ovary, broadly ovate-lanceolate, acuminate at tip, finely puberulous along margin. Lateral sepals obliquely lanceolate, spreading, abruptly acuminate, 5-nerved. Dorsal sepal ovate-oblong, concave, acuminate, finely scabrid, 3-nerved. Lateral petals bipartite, almost to the base, densely hirsute or bearded along the margins; lower segment slightly shorter than the upper segment, curved. Lip spurred, longer than ovary, trilobed below the middle with a narrow claw; lobes narrow, divaricate, midlobe subequal with side lobes. Spur shorter than ovary. Capsule 2.5 cm, long, ribbed, fusiform.

Fl. & Fr.: September-October.

Exsiccata: MPB - 20349.

Distribution: Very rare. It grows near the edges of the forest at an altitude c. 800 m. Kolik (Chandgad) in Kolhapur district.

Note: Earlier it was known from Nilgiri hills,

Tamil Nadu.

2. *Rhynchosia viscosa* (Roth) DC. Prodr. 2: 387. 1825; Hook. f. Fl. Brit. India 2: 225. 1876. Sharma *et al.* Fl. Karnataka 81. 1984. *Glycine viscosa* Roth. Nov. Pl. Spec. 349. 1821. (Fabaceae).

Twiner or spreading herb; branchlets densely viscid-tomentose. Leaves 3-foliolate, 6-8 cm long; leaflets ovate-deltoid, 3.0-5.0 x 2.0-4.5 cm, tomentose; base cuneate, obtuse; apex acuminate, apiculate; stipules lanceolate. Flowers brownish-purple, in 8-15 cm long dense racemes; bracts minute. Calyx tomentose; lobes lanceolate. Corolla exerted; deep brown-purple; wings and keels yellowish. Ovary pubescent. Pods oblong, horned, viscid-pubescent, 2-4 seeded.

Fl. & Fr.: November-January.

Exsiccata: MPB-6054.

Distribution: Rare along ghats. Khadgaon, Pasarni ghat in Satara district.

Note: Earlier it was known from Karnataka and Tamil Nadu.

3. *Richardia scabra* L. Sp. Pl. 330. 1753; Balkr. Bull. Bot. Surv. India 6: 85. 1964. Mathew, III. Fl. Tamil Nadu Carnatic t. 346. 1982; Sharma *et al.* Fl. Karnataka 132. 1984. (Rubiaceae).

Procumbent herb; branchlets spreading, terete to angular, hispid. Leaves simple, decussate or whorled, elliptic-ovate, 2-4 x 1-2 cm, scabrous; base obtuse; apex acute; petiole 5 mm long; upper leaves sessile; stipules setiferous. Flowers 3-merous in terminal sessile, capitate clusters, subtended by 4 subsessile leaves. Calyx truncate, globose; lobes 6, abovate, scabrous. Corolla white; lobes 6, triangular. Stamens 6, partly

exserted. Ovary subglobose, papillose, 3-celled. Capsules 3-valved; epicarp scabrous.

Fl. & Fr.: August-December.

Exsiccata: MPB-21110.

Distribution: Common weed in groundnut and sweet potato fields. Kargaon in Satara district; Karve, Chandgad in Kolhapur district.

Note: It is a native of Tropical America. Earlier in India, it was known from Karnataka and Tamil Nadu.

4. *Rotala occultiflora* Koehne, Bot. Jahrb. 1: 152. 1880; Blatt. & Hallb. *J. Bombay Nat. Hist. Soc.* 25: 705. 1918; Sharma *et al.* Fl. Karnataka 108. 1984; Joseph & Sivaranjan *Pl. Sci.* 99 (3): 191. t. 5. 1989. (Lythraceae).

Small herb; stem creeping and rooting below; branches erect, 4-6 cm tall. Leaves in whorls of 3, obspathulate, plicate; base dilated, enclosing the flowers, 0.6-0.9 cm long. Flowers shortly pedicellate, solitary in the axils of bractiform leaves. Calyx tube translucent, 1 mm long; lobes 4, triangular. Petals

absent. Stamens 2, inserted near the base of calyx tube. Ovary ellipsoidal; style short, persistent; stigma capitate. Capsule ellipsoidal, 3-valved. Seeds semi-ellipsoidal.

Fl. & Fr.: August-October.

Exsiccata: MPB-21242.

Distribution: Rare in wet places. Kaas in Satara district.

Note: An inconspicuous, ephemeral species. Earlier it was known from Karnataka and Tamil Nadu.

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20. *CLITORIA ANNUA* GRAHAM VAR. *EMARGINATA* (VAR. NOV.): A NEW VARIETY OF SPECIES *CLITORIA ANNUA* GRAHAM (FAMILY: FABACEAE) FROM MAHARASHTRA, INDIA

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During a floristic survey of flowering plants in Sawarna taluka, Nashik district, Maharashtra, in November 2009, we came across an interesting plant of the genus *Clitoria* in open grassland near the Sawarna river. A few plants from the area were collected, processed and preserved. Comparison with the material deposited at Blatter Herbarium (BLAT) and literature at the BLAT library (Almeida 1990, 1998, 2005; Cooke 1902; Hooker 1876) confirmed it as a new variety of *Clitoria annua* Graham. Family Fabaceae, and was named *Clitoria annua* Graham var. *emarginata* (var. nov.)

Clitoria [L., Gen. ed. 1, 344. 1737]; L., Sp.Pl. 753. 1753; Benth. & Hook. f., Gen. Pl. 1: 527, 1865 (Fabaceae, 1753). Clitoris = an anatomical term in Zoology. Lectotype: *C. ternatea* L. (vide Britton *et* Brown, Ill. Fl. United States and Canada 2: 416. 1913. Type: *C. ternatea* L. spp.: 40 (Sant. & Henry), 70 (Mabb.), Trop. America – 3 in India. *C. ternatea* L., "Aparajita, Shankhapushpi, Butterfly pea" (Trop. America) – Now pantropic in cultivation. *C. annua* Graham, endemic to Mumbai. Found in two varieties, typical one (*C. annua* var. *annua*) and *C. annua* var. *sekharii* Almeida & Chaturvedi, both endemic to Mumbai.

Present variety is the second variety, beside the typical one.

Clitoria annua Graham, Cat. Bombay Pl. 47, 1839; Almeida & Almeida in *J. Bombay Nat. Hist. Soc.* 84: 719-722. 1986; Almeida, Fl. Maharashtra Vol. 2: 29, 1998.

Herbaceous, erect, 40-50 cm high; stem angular, with hairs. Leaves imparipinnate; petioles 9-12 mm long, hairy; stipules 3 mm long, subulate. Leaflets 5, membranous (terminal the largest and lowest pair of lateral leaflets smaller than the rest) 5-8 x 1-4 cm, variable in shape, broadly elliptic-oblong, subobtusate to lanceolate, acute, sparingly strigose above, more densely beneath; petiolules 2 mm long; stipules filiform. Flowers in axillary 2-flowered racemes; peduncles and pedicels very short; bracts linear-lanceolate, subulate; bracteoles 6-8 mm long, ovate or lanceolate, aristate. Calyx tubular, 1-2 cm long, hairy, nerved; teeth shorter than tube, lanceolate, aristate. Corolla 2.5 cm long, blue. Pods 25-50, 6 mm flat reticulately veined, pubescent. Seeds 5-6, turn black after dry.

Fl.: August-October.

Distribution: H. Santapau- 16540 collected from Sasan